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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,706	07/15/2003	Sanjay Patel	29617/38341	7166

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EXAMINER

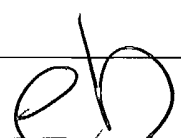
FAISON, VERONICA F

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/619,706	PATEL ET AL.	
	Examiner	Art Unit	
	Veronica F. Faison	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-42 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 16-36 is/are rejected.
- 7) ☒ Claim(s) 10-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10-17-03, 5-7-04</u> | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 16 contains the trademark/trade name "Dahlia", "Diamond Green B", "Cotton Blue", "Acid Fuschsin", "Acid Green", "Acid Magenta", "Acid Roseine", "Acid Rubin", "Alizarol Cyanin R", "Aluminon", "Aniline Blue Ws", "Chrome Violet Cg", "Chromoxane Cyanin R", "Eriochrome Cyanin R", "Gentain Violet", "Helvetia Blue", "Hoffman's Violet", "Light Green", "Lissamine Green Sf", "Magenta 0", "Magenta I", "Magenta Ii", "Magenta Iii", "New Fuchsin", "Night Blue", "Solochrome Cyanin R", "Victoria Blue 4r", "Victoria Blue B", "Victoria Green B" and "Water Blue I". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe

diarylmethane, triarylmethane and methine dyes and, accordingly, the identification/description are indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,17, 22, 24, 25, 27, 28, 30, 32-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (US Patent 4,213,717).

Lin teaches a ball point ink pen, it ink and its eradicator, wherein the ink is carried at one end of the pen and the eradicator is carried at the other. The reference further teaches that if an error is made, the pen can be reversed and the eradicator form end used to neutralize the ink. The ink also neutralized the eradicator so that when one rewrites the same ink , any remaining eradicator on the paper is neutralized and the original ink acts as fresh ink (abstract and col. 1 lines 23-31). The ink may comprise acid blue 22 (triphenyl methane dye) carried in a glycol vehicle, preferably the vehicle is glycerine (solvent) with water and as a binder gum Arabic (gelling agent) (col. 1 lines 53-55). The eradicator comprises water and ethanol together with pH balanced bases wherein the preferred embodiment ethanol amine, potassium hydroxide and triethylene tetramine (col. 57-64). The eradicator may be chosen from a group of amines (col. 2 lines 38-40). The preferred dye is acid blue 22, but other dyes that react with the eradicator to form colorless products may be used including diphenyl methane and

triphenyl methane dyes (col. 2 lines 46-51). The reference remains silent to the shear-thinning index. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain an ink composition with applicants claimed shear-thinning index, when the compositions are similar. The composition as taught by Lin appears to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5, 8, 9 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (717) as applied to claims 1-4, 17, 22, 24, 25, 27, 28, 30, 32-35 above, and further in view of Miyata et al (3,945,837)

Lin is described above but fails to teach the specific dyes set forth in claim 5.

Miyata et al teach an ink composition comprising methine, diphenyl methane and triphenyl methane dyes. Triphenyl methane dyes including acid blue 22, basic green 1 and 4, and methine dyes including basic red 14 that may be use alone or in combination (col. 5 line 15+).

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced acid blue 22 with basic green 4 because the substitution of art recognized equivalents as shown by Miyata et al would have been within the level of ordinary skill in the art.

When general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by changing the size, color, shape, proportion of shape, degree and sequence of added ingredients through routine experimentation. (In re Rose, 105 USPQ 137; In re Aller 220F, 2d 454, 105 USPQ 233,235 (CCPA 1955); In re Dailey et al., 149 USPQ 47; In re Reese, 129 USPQ 402; In re Gibson, 45 USPQ 230). Therefore it would have been obvious to one of ordinary skill in the art to use a combination the dyes to achieve a desired color as long as they perform the desire function of being eradicated.

Claims 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (717) as applied to claims 1-4,17, 22, 24, 25, 27, 28, 30, 32-35 above, and further in view of White et al (5,378,752).

Lin is described above but fails to teach the specific eradicator set forth in claims 29 and 31.

White et al teach an ink eradicator system, which comprises an eradicator fluid that includes a reducing sulfur compound, a film-forming polymer, and water (abstract and col. 2 line 31+) and an ink containing a dye that can be reduced to colorless form by the reducing compound. The reducing agent includes sulfite salts, basic nitrogen compounds, phosphite salts and sodium carbonates (col. 2 lines 31-46). The reference further teaches that suitable ink are those which contain dyes which can be reduced to colorless form by the selected reducing agent, i.e. when the reducing agent is a sulfur compound, dyes which can be reduced by the sulfur compound , for example triaryl methane (triphenyl methane) (col. 3 lines 15-25).

Therefore it would have been obvious to one of ordinary skill in the art to use the reducing agent as taught by White et al with the ink composition of Lin, because White et al teaches that the sulfite reducing agent eradicate triphenyl methane dyes.

Claims 1-4, 6-7, 17-22, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loftin (US Patent 4,971,628) in view of Lin (US Patent 4,213,717).

Loftin teaches an aqueous-based shear-thinning ink composition wherein the ink has a shear-thinning index of between about 0.5 to about .9 (col. 2 lines 36-49). The reference discloses xanthan gum present in the amount of 0.1 to 6 percent by weight as a polymeric shear-thinning material (col. 3 lines 33-47). Polyvinylpyrrolidone is used in the ink composition in the amount of 0.1 to 20 percent by weight to improve shock resistant (col. 3 line 48-col. 4 line 42). The reference teaches that the polar solvent system may comprise from about 50 to about 99 percent by weight of the ink, while water is the primary solvent other solvents may be used. Solvents including ethylene glycol, diethylene glycol and triethylene glycol may be used in the amount of 5 to about 20 percent by weight as a wetting agent (col. 4 line 57-col. 28). The colorant used in the ink composition may be any of the water-soluble or water-dispersible dyes or pigment or mixtures thereof in the amount of up to 30 percent by weight (col. 5 lines 45-58). The ink composition can comprise sequestering agents to maintain or improve stability (col. 5 lines 59-66) present in the amount of 1 to 50 percent by weight. Loftin fails to specific teach the dyes set forth in claim 1.

Lin is described above which disclose an ink composition having the specific dyes set forth in claim 1 and has a similar ink composition as taught by Loftin.

Therefore it would have been obvious to one of ordinary skill in the art to use the dyes disclosed by Lin because Loftin teaches that any dye that is water-soluble or water-dispersible may be used.

Claims 1- 4, 6-7, 16, 17, 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami (US Patent 6,261,352).

Asami teaches a water-based ball point pen ink composition comprising a colorant, water, surfactant and an agent for imparting shear-thinning properties wherein the ink composition has a shear-thinning index of from 0.1 to 0.7 (abstract and col. 1 lines 43-67). The reference discloses that any dye and pigment soluble or dispersible in an aqueous medium can be used such as Malachite Green, which may be present in the amount of 1 to 25 percent by weight and used alone or in combination (col. 4 line 26-col. 5 line 23). The ink vehicle may be comprised of water and an organic solvent such as polyethylene glycol, ethylene glycol and diethylene glycol in the amount of 5 to 35 percent by weight (col. 5 lines 24-39). Water-soluble resins such as polyvinylpyrrolidone and polyvinyl alcohol present in the amount of 1 to 30 percent by weight can be used for enhancing adhesion to paper surfaces or thickening the ink composition (col. 5 lines 41-47). The reference discloses that the surfactant of formula I may be used in combination with a known ingredient having shear-thinning properties including a resin, gum, thickening polysaccharide or inorganic particulate material (col. 6 line 5-8). Asami fails to specifically exemplify the use of diarylmethane, triarylmethane and methine (Malachite Green) as claimed by applicant. Therefore, it would have been obvious to one of ordinary skill in the art to use the specific dye (Malachite Green) as

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claimed by applicant as Asami also discloses the use of Malachite Green but shows no example incorporating them.

Allowable Subject Matter

Claims 10-15 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The references alone or in combination fail to teach the specific dye ratios and weight percents in view of the rest of the claim limitations.

Claims 37-42 are allowed.

The following is an examiner's statement of reasons for allowance:

The references alone or in combination fail to teach a black eradicable gel ink with the specific combination set forth in claim 37. Therefore the references are not seen to teach or fairly suggest the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 571-272-1366. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Veronica F. Faison